

Date: Tuesday, 4/25/2006 7:35:10 AM
 User: Kim Johnston

Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: LUG BRACKET
Job Number	: 26786B		
Estimate Number	: 10339		
P.O. Number	: N/A	Part Number	: D2658
This Issue	: 4/25/2006 S.O. No. : N/A	Drawing Number	: D2658 REV D
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: N/A Type : PURCHASED PARTS	Drawing Revision	: D
Previous Run	: 21713B	Material	: N/A
Written By	: <u>SKY COMMENT BEKW</u>	Due Date	: 5/10/2006 Qty: 30 Um: Each
Checked & Approved By	: <u>06.04.25</u>		
Comment	: Est Rev: A New Issue 05-11-07 JLM		

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	PG	PURCHASING
-----	----	------------



Comment: PURCHASING

Issue P/O: 1090

Laser cut per Drawing Flat pattern D2658

Material release note required

C206104125 (30)

2.0	D2658F	Lug Bracket
-----	--------	-------------



Comment: Qty.: 1.0000 Each(s)/Unit Total : 30.0000 Each(s)
 Lug Bracket

3.0	PACKAGING 1	PACKAGING RESOURCE #1
-----	-------------	-----------------------



Comment: PACKAGING RESOURCE #1

Receive & Inspect For Transit Damage

Ensure material certification is attached

06/05/09 (30)

4.0	QC6	DIMENSIONAL CHECK
-----	-----	-------------------



Comment: DIMENSIONAL CHECK

Inspect dimensions per template D2658T1

06.05.10 (30)

5.0	BRAKE NC	NC BRAKE
-----	----------	----------



Comment: NC BRAKE

1-Deburr as required.

2-Bend on CNC brake using DT8254 Identify as D2658

06/05/19 (30) 06.05.19 (30)
06/05/10
 M.F.

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes ☒ No ☐ DQA: DP Date: 06/05/26

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action		Section B		Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

NOTE: Date & initial all entries

Date: Tuesday, 4/25/2006 7:35:10 AM
User: Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: LUG BRACKET

Job Number: 26786B

Part Number: D2658

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

QC5

INSPECT WORK TO CURRENT STEP



060526

(30)

Comment: INSPECT WORK TO CURRENT STEP

7.0

DC

DOCUMENT CONTROL



Comment: DOCUMENT CONTROL
Inspection Level 21

DP 06105106

(30)

Job Completion



W 060526

W/O:		WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE		By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)							
DATE	STEP	Description of NC Section A	Corrective Action		Section B		Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date				

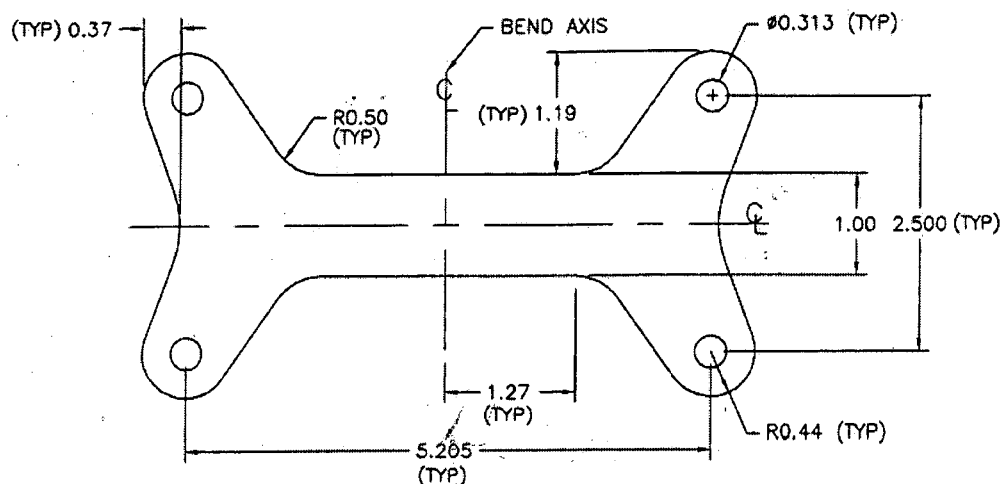
NOTE: Date & initial all entries

DART

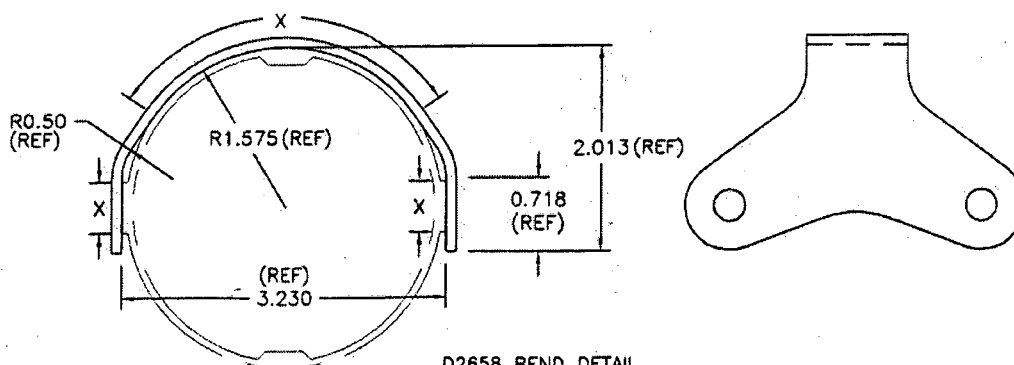


DESIGN [Signature]	DRAWN BY [Signature]	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED CP	APPROVED KE	DRAWING NO. D2658	REV. D SHEET 1 OF 1
DATE 98.12.14		TITLE LUG BRACKET	SCALE 5:9
A	97.11.03	NEW ISSUE	
B	97.12.18	5.205 WAS 5.015, ADD TOOLING HOLE	
C	98.10.23	UPDATE MATERIAL (TSR A1114)	
D	98.12.14	REMOVE TOOLING HOLE (TSR A1040)	

RELEASED
98.12.14 DS



D2658 FLAT PATTERN
SYMMETRICAL ABOUT BOTH CENTRE-LINES (C)



D2658 SHOULD BE BENT SO THAT IT IS WITHIN 0.010 OF THE OUTSIDE PROFILE OF THE D2600-1 EXTRUSION IN THE AREAS INDICATED 'X' ABOVE.

GENERAL NOTES

MATERIAL: ASTM A36/A366/A569/A570 OR AISI 1010-1025 STEEL 0.100 THICK (12 GAUGE)
MIN. ULTIMATE TENSILE STRENGTH = 42 ksi
MIN. YIELD TENSILE STRENGTH = 28 ksi

TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
ALL DIMENSIONS ARE IN INCHES

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 26786B

MILL TEST CERTIFICATE

Shanxi Taigang Stainless Steel CO.,LTD Member
of Tatyuan Iron and Steel (Group) Co.,LTD

NO.2 jiucaoping, Taiyuan, Shanxi, P.R.China

TEL: (0351)3013328 FAX: (0351)3017816

<http://www.tlsc.com.cn>

E-mail: igbxg@tisco.com.cn

MATERIAL	AISI304 No.2B Finish
----------	----------------------

SPECIFICATION	ASTM A240/A480
---------------	----------------

ASME SA240/SA480

L/C NO.

CERTIFICATE NO. 20051187

DATE OF ISSUE

11

CONTRACT NO.

1187

DATA OF

2005/1/20

CUSTOMER

OLBERT

Product

Mening furnuo

INVENTORY STAMP

Mark of the Manufacturer

COIL

E-VOD

Shanxi Taiyuan Stainless Steel Co., Ltd

COIL		COIL NO.		Quantity	Dimensions	Weight (kg)
NO.	Heat No.	Coil No.				
		5A9-495-12D	1	11GA x 48 x C	7004	
8.	4505286	5A9-485-12B	1	11GA x 48 x C	6679	
9	Y506019	5A9-458-12Y	1	14GA x 48 x C	5461	
10	4505044	5A9-450-12D	1	11GA x 48 x C	4832	
11	4505274	5A10-44-32J	1	16GA x 48 x C	8906	
12	4505271	5A10-53-32J	1	16GA x 48 x C	8617	
13	4505050	5A10-70-42Y	1	14GA x 48 x C	8642	
14	4505393					

Chemical Composition

Chemical Composition											
Heat No.	C	Si	Mn	P	S	Cr	Ni	Cu	Al	Mo	N
4505286	0.060	0.470	1.400	0.017	0.003	18.170	8.920	0.010	0.010	0.010	0.055
Y506019	0.050	0.350	0.990	0.032	0.004	18.300	8.090	0.440	0.006	0.120	0.070
4505044	0.060	0.450	1.370	0.018	0.002	18.200	8.120	0.010	0.010	0.010	0.050
4505274	0.060	0.520	1.320	0.017	0.002	18.150	8.120	0.010	0.010	0.010	0.045
4505271	0.060	0.470	1.320	0.016	0.003	18.170	8.110	0.010	0.010	0.010	0.045
4505050	0.050	0.480	1.290	0.014	0.002	18.220	8.040	0.010	0.010	0.010	0.045
4505393	0.070	0.480	1.260	0.017	0.002	18.200	8.070	0.010	0.010	0.010	0.040

Mechanical Properties

Mechanical Properties						Hardness		
Test No.	Tensile R _m N/mm ²	R _{p0.2} Yield _{0.2%} N/mm ²	R _{p1.0} Yield _{1.0%} N/mm ²	Elongation A _{5%}	Corrosion Tests	HRE	HV	HRC
4505286-T	635	282		53		84 - 83		
Y506019-T	650	266		53		88		
4505044-T	675	307		59		83 - 83		
4505273-T	690	299		56		86 - 85		
4505271-T	700	326		54			182 - 186	
4505050-T	695	297		57			190 - 188	
4505393-T	680			60		86 - 85		

Surface and dimensions controlled:

Work Inspector

P60124PC001V 3042B .062X48 HT 4505271 4505050



New Zealand Steel Limited
 Glenbrook, South Auckland
 Postal: Private Bag 32721, Auckland, New Zealand
 Telephones: (09) 375 8399 / 375 8111 Auckland
 (09) 235 6309 / 235 3535 Waikato
 Fax: (09) 375 8369

TEST CERTIFICATE

Ref: 584322703

CUSTOMER		Wilkinson		SPECIFICATION		ASTM A1011 CS Type B		CERTIFICATE No.		TC124648	
CUSTOMER ORN		98-31N-108		PRODUCT		HOT ROLLED PICKLED & OILED		PAGE		1 of 1	
MILL O/N		518691		DIMENSIONS		0.104" x 48" x Coil		DATE		17 January 2006	

PACK NUMBER	(Sample) HEAT No	CHEMICAL COMPOSITION PERCENT														MECHANICAL TESTS (TEST SPECIFICATION)								
		C	Si	Mn	P	S	Cu	Ni	Cr	Mo	V	Nb	Tr	Al	B	N2	CE	BEND 180°	YIELD	T.S.	ELONG GL=	HARDNESS	r ()	LENGTH (feet)
		x100			x1000											x10000	x100							
HP-997711-00	646664	6	1	20	9	19												Good						942
HP-997712-00	646664	6	1	20	9	19												Good						961
HP-997713-00	646846	5	TR	20	11	19												Good						953
HP-997714-00	646846	5	TR	20	11	19												Good						955
HP-997715-00	646664	6	1	20	9	19												Good						955
HP-997716-00	646664	6	1	20	9	19												Good						958
HP-997717-00	646846	5	TR	20	11	19												Good						958
HP-997718-00	646846	5	TR	20	11	19												Good						958
HP-997719-00	646846	5	TR	20	11	19												Good						958
HP-997720-00	646846	5	TR	20	11	19												Good						958
HP-997721-00	646846	5	TR	20	11	19												Good						958
HP-997722-00	646846	5	TR	20	11	19												Good						958

YIELD (A)=0.2% PROOF STRESS (B)=LOWER YIELD STRESS	GAUGE LENGTH (GL)			PLASTIC STRAIN RATIO (r)		IMPACT TEST		CARBON EQUIVALENT VALUE (CE)	
	(A)=200mm (B)=50mm	(C)=80mm (D)=8.65 ± 5°	(E)=2" (F)=8"	(A)=0 (B)=90	(C)=0.5 (D)=(0.001245) / 4	(A)=10mm x 10mm (B)=7.5mm x 10mm	(C)=5mm x 5mm (D)=2.5mm x 10mm (E)=5mm x 10mm	(A)=C+Mn/6 (B)=C+Mn/6+(Cr+V+Mo)/5+(Cu+Ni)/15	(C)=C+Mn/6+S/24 (D)=

WE HEREBY CERTIFY THAT THE MATERIAL DESCRIBED HEREIN HAS BEEN TESTED AND INSPECTED
 WITH SATISFACTORY RESULTS IN ACCORDANCE WITH THE REQUIREMENTS OF THE ABOVE SPECIFICATION

APPROVED *Satish Misra*
 QC MANAGER

584322703-1 T M INDUSTRIAL (95122ME003-646846)